



**HANDBOOK**  
**On**  
**Crew Coordination**  
**For**  
**Vehicle Driver's**

**“If you cry “Forward”, you must without fail make plain in what direction to go. Don’t you see that if, without doing so, you call out the word to both a monk and a revolutionary; they will go in directions precisely opposite?”**

**----- Anton Chekhov**

## Preface

Even though Anton Chekhov was a Russian playwright, his words of wisdom ring true today when it comes to communication. We use communication in almost everything we do, in most cases, it doesn’t matter how much or when we say it.

This is truly not the case when decisions need to be made clearly, concisely, understood completely and in a moments notice. Numerous accidents have been avoided by a driver and a vehicle commander communicating in such a way that all commands and directions are clearly given and received. It’s a two way street; you may be a scholar of the English language but if the person next to you didn’t or doesn’t understand what you said or meant, your words were for naught. Then there is the accident. Statements like, “I told you to watch out or look out,” come to mind. And of course all of us have used, “Did you see that?” These are not communication skills that afford the other person any opportunity to be successful.

The 2d Infantry Division has incorporated into the 2ID Regulation 56-4, Annex H a Crew Coordination Training Requirement. It is a great training tool and has helped prevent accidents. The 8th Army Command Safety Office would like to expand on what has already been a routine in the 2ID. With these further explanations and procedures we hope that clear and concise communication will increase while the accidents decrease.

## CREW COORDINATION DECISION MAKING

1. Crew coordination is defined as crew member interaction (communication) and actions (sequence and timing) necessary for efficient, effective, and safe performance of tasks. Essential elements of crew coordination are explained below:

- a. Communicate positively – Communication is positive when the sender directs, announces, requests, or offers, the receiver acknowledges; the sender confirms, based on the receiver's acknowledgement and/or action. Crew members must use positive communication procedures for the essential crew coordination actions identified in the description of each task. They should remain aware of the potential for misunderstandings and make positive communication a habit. Positive communication is: quickly and clearly understood; permits timely actions; makes use of a limited vocabulary of explicit terms and phrases to improve understanding in a high-ambient noise environment.
- b. Announce actions – To ensure effective and well-coordinated actions, crew members must be aware of expected vehicle movements and unexpected individual actions. Each crew member will announce any action that affects the actions of the other crew member(s). Such announcements are essential when the decision or action is unexpected and calls for the supporting action from the other crew member(s) to avoid a potentially hazardous situation.
- c. Acknowledge actions – Communications must include supportive feedback to ensure that all crew members correctly understand announcements and directives. Acknowledgements need to be short and need to positively indicate that the message was received and understood. "Roger" or "Okay" may not be sufficient. The preferred method is to repeat critical parts of the message in the acknowledgement.
- d. Be explicit – Crew members must avoid using terms that have multiple meanings; misinterpretations can cause confusion, delays and accidents. Examples of these terms are "Right", "Back up" and "I have it". Crew members also must avoid using indefinite modifiers such as "Do you see that tree?" or "You are going a little fast". In such cases, one crew member may mistakenly assume that the other crew member's attention is focused on the same object or event. More confusion arises when each crew member interprets the terms differently.
- e. Obstacle advisories – Crews must anticipate obstacles along roadways. Obstacles are even more difficult to see with the NVG. Therefore, crew members wearing NVG must consider obstacles a primary task directive.

- f. Coordinate sequence and timing – Proper sequencing and timing ensures that actions of one crew member mesh with the actions of the other crew member (s).

2. Crew coordination begins with battle roster and training, proceeds through mission planning, and culminates in the effective execution of crew tasks. Crew coordination directly relates to mission performance, and includes the following:

- a. Involvement of the entire crew in mission planning and rehearsal of critical mission events and contingencies.
- b. Development of standardized communication techniques, including the use of confirmation and acknowledgement.
- c. Assignment of specific task priorities and responsibilities to each crew member and their confirmation of those responsibilities as part of the crew briefing.
- d. Involvement of each crew member in monitoring the need for assistance in coping with terrain, visual conditions, mission, and other stressors.
- e. Development of positive team relationships to preclude overconfidence or sub-conscious intimidation because of rank or experience differences.

### 3. GENERAL CONSIDERATIONS

- a. Crews must use crew coordination procedures in the task descriptions during day operations so that they develop good habits that will transfer to more critical night and NVG operations.
- b. When operations are conducted under conditions of restricted or reduced visibility, crew coordination becomes more critical.
- c. Information reporting helps the crew maintain a high level of situational awareness.

## WHAT IS AN “EFFECTIVE CREW”?

- Effective crews are made up of assertive crewmembers who provide input to the Vehicle Commander
- Each crewmember knows they are a member of the team and are willing to help fellow crewmembers without being asked
- The entire crew participates as a team in mission planning, execution, & After Action Reviews
- With the exception of high workload conditions, or short notice missions, information is analyzed when making decisions & crewmembers contribute



- The vehicle climate is open but professional during the mission, Vehicle Commanders establish and maintain this climate
- Crewmembers provide timely and clearly stated information to one another to maintain a common understanding of conditions, actions, and decisions
- Crew After Action Reviews are constructive and seen as a learning experience to enhance future crew performance



# CREW COORDINATION OBJECTIVES

- Establish and Maintain Team Relationships
- Mission Planning and Rehearsal
- Establish and Maintain Workload Levels
- Exchange Mission Information
- Cross-Monitor Performance



# CREW COORDINATION OBJECTIVES

- **Establish and Maintain Team Relationships**
  - Vehicle Commander (VC) establishes and maintains an open crew climate
  - Defines authority and responsibility
  - VC sets tone and maintains working environment
  - Effective leaders use authority but do not operate without participation
  - When crewmembers disagree, crews resolve the disagreement (VC has final authority with input from crew)
- **Mission planning & rehearsal**
  - Pre-mission planning and rehearsal tasks are accomplished
  - Crews think through contingencies and actions to be taken
  - Crew duties and responsibilities are assigned





## CREW COORDINATION ELEMENTS

- Cross-monitor performance
  - Crewmember actions are mutually cross-monitored
  - Supporting information and actions are offered by crewmembers
  - Advocacy and assertion is practiced
  - Crew-level After Action Reviews are accomplished



# INDIVIDUAL COORDINATION

- **Communicate Positively**
  - Positive communications where messages are sent and acknowledged
  - Information is requested, offered, and announced
- **Direct Assistance**
  - Crews direct assistance when they need help from other crewmembers
  - This is not challenging the Vehicle Commander's authority
- **Announce Actions**
  - This ensures effective and well coordinated actions by the crew
  - Each crewmember announces any actions that affect actions of the crew ("Warning Shot!" by HMMWV gunner)
- **Offer Assistance**
  - Crewmembers provide assistance or information when requested or if it appears another crewmember needs help



# INDIVIDUAL COORDINATION

- **Acknowledge Actions**
  - Communication must include supportive feedback to ensure it is correctly understood (“Roger” or ask)
- **Be Clear & Precise**
  - Use plain language & clear terms
  - Avoid slang or terms that have multiple meanings (“I have it”, “Right”)
- **Provide Vehicle Control and Hazard Advisories**
  - Use Clock position from vehicle front (“Enemy contact at 3 O’clock!”)
  - Right side/Left side used in reference to how the crew is sitting
- **Coordinate Action Sequence and Timing so Crew Actions Mesh**
  - Weapons engagements
  - Turret movements
  - Combat maneuvering



# STANDARD CREW TERMINOLOGY

- **To enhance crew communication and coordination use words known by everyone in the crew**
  - Words and phrases must be clear and concise to prevent confusion
  - Terms that have the multiple meanings should be avoided
  - Use standard terms for equipment found in operators manuals
  - Clarify what you said if not understood



# SITUATIONAL AWARENESS

- **To ensure the whole crew has and keeps situation awareness:**

- Keep chatter to a minimum and “sterilize” communications to focus on the mission during critical events / times
- Use vehicle intercom systems if they are available to enhance crew communications
- Clarify what you said if not understood
- Ask if you don’t know what was said or what is happening



## Remember!

- Crew Coordination and Communication is an art that good crews constantly improve
- Practice and After Action Reviews (AARs) are critical in making crew coordination better
- Crew Coordination techniques:
  - Are combat proven
  - Can help you and your crew better accomplish your mission



#### 4. DRIVERS/VEHICLE COMMANDERS VERBIAGE IN USING CREW

**COORDINATION:** Standardized words and phrases, such as those used in radio transmissions, helps to avoid confusion and allow crews to react more quickly and efficiently. Using words known by everyone in the crew also prevents them from having to be repeated. If the Operator's Manuals has a standard callout or term for a piece of equipment, get in the habit of using it, especially if a new crewmember joins the team. If someone doesn't understand what you said, try saying it another way, in clearer terms, to get the message through instead of repeating what you said multiple times or raising your voice. Examples of common words or phrases are listed in the table below.

WORD or PHRASE	MEANING
Affirmative	Yes
Cease Fire	Command to stop firing but continue to track
Clear	Clear of obstacle or traffic (e.g. clear right) / Weapon is clear
Execute	Command to initiate an action
Firing	Announcement that a weapon is to be fired
<b>Get Out!</b>	Command to make an emergency exit from vehicle ( <b>say 3X</b> )
Hold	Command to hold present position
Maintain	Command to continue or keep the same
Monitor	Command to maintain constant watch or observation
Move	Command followed by direction (Forward, Back)
Negative	No, Incorrect, or permission not granted
Now	Indicates that an immediate action is required
Report	Command to notify
Roger	Message received and understood
<b>Rollover!</b>	Command to brace / Take immediate rollover action ( <b>say 3X</b> )
Say Again	Repeat your transmission
Slow down	Command to reduce speed
Speed up	Command to increase speed
Stop	Command to go no further, halt present position
Target	An alert that a threat has been spotted
Traffic	Refers to another vehicle, followed by a clock position
Turn	Command to deviate from current course, followed by direction
Unable	Indicates inability to comply with instruction or request
Up On	Indicates radio selected and frequency
Weapons Red/Amber/Green	Indicates loaded status of weapon
Weapon on Fire/Safe	Indicates status of weapon selector switch
Wilco	I have received your message, understand, and will comply

## 5. CREW EVACUATION DRILLS

Crew evacuation drills are often overlooked during training. The probability of an injury can be significantly reduced if crews use proper proactive evacuation techniques. Vehicle TMs provide emergency procedures, which should be incorporated into driver and crew training programs. What are these common phrases used in the roll over procedure? Listed above along with the vehicle TM should be trained and rehearsed to ensure confidence in the real situation.



## **Glossary:**

*Assistant Driver*- Personnel That aid the primary operator of a military vehicle during extended hours of operation. Assistant drivers may be the senior occupant or the VC. However, a convoy commander may not serve as an assistant driver.

*Convoy Commander* – Noncommissioned officer, warrant officer, or commissioned officer that is overall responsible for the safe movement of a military convoy and is certified under the unit's convoy commander certification program. Convoy commanders will be in the grade of E-7 or above. An E-6 serving in the duty position of an E-7 may be certified as a convoy commander as long as it is documented in a certification memorandum signed by the battalion commander. The convoy commander will not be the operator of a vehicle in a convoy for which he is the commander. **Splitting wheeled-vehicle convoys in order to alleviate the requirement for convoy commanders is a direct violation of the spirit and intent of this regulation.**

*Driver*- primary operator of a motor vehicle. Drivers will be properly licensed on vehicles they are operating.

*Senior Occupant*- The senior occupant is highest-ranking Soldier in a military vehicle and normally serves as an assistant driver or VC. The senior occupant may also serve as the driver. They have overall responsibility for the safe movement of the vehicle. **Under most circumstances, the senior occupant and the VC is the same person. The only time this will not be the same person is if the senior occupant is not certified under the unit's VC certification program.**

*Senior Occupant responsibilities*- the senior occupant in a military vehicle is the ranking individual present. The senior occupant will –

1. Ensure the driver does not exceed the maximum operating hours listed in AR 385-55 without a rest break.
2. Not permit a driver who appears fatigued or physically, mentally, or emotionally impaired to operate a vehicle.
3. Ensure the authorized seating capacity of the vehicle is not exceeded.
4. Ensure vehicle occupants wear installed restraint systems when the vehicle is in motion.
5. Assist the driver in recognizing unsafe traffic situations and unsafe mechanical conditions of the vehicle.
6. Assist the driver in backing or executing other difficult maneuvers.
7. Ensure the driver complies with road signs and posted speed limits and adjusts as dictated by weather, traffic, and road conditions.
8. Ensure highway warning devices are properly displayed when the vehicle is stopped on or beside the traveled portion of the street, road, or highway (see FM21-305).
9. Post personnel, if applicable, to warn approaching traffic when the vehicle is halted or disabled in a manner that may obstruct traffic.
10. When traveling in convoy, relay to the last vehicle information received from the convoy commander and ensure compliance with march discipline when at a halt.
11. Ensure tire chains are used when needed and are removed when no longer needed.
12. Ensure the driver maintains proper interval between vehicles.
13. Ensure driver's vision is not obstructed.
14. Ensure that only authorized personnel are allowed to travel in Government vehicles, and that Government vehicles are used for official purposes only.
15. Be responsible for the overall safety of the occupants according to AR 385-55.

*Indefinite modifiers*- ambiguous mismatches between subject and predicate

*Combat vehicles*- land or amphibious vehicles, with or without armor or armament, designed for specific functions in combat or battle. They are designed to be highly mobile in off-road operations. Some typical combat vehicles are tanks, self-propelled artillery, missile launchers, and armored cars.

*Emergency vehicles*- Police vehicles, ambulances, fire trucks, and crash-rescue vehicles.

*Military design vehicles* – Motor vehicles (excluding general purpose commercial design) designed according to military specifications to meet transportation requirements for the direct support of combat or tactical operations, or for training of troops for such operations.

*Motor vehicle*-an item of equipment mounted on wheels, which is designed for highway or land operations or both and which derives power from a self-contained power unit, or is designed to be towed by and used together with such self-propelled equipment.

*Vehicle Commander (VC)*-Soldier that is overall responsible for the operation of a military vehicle and is certified under a unit's VC certification program. VCs must be in the grade of E-4 and above. KATUSAs

in the rank of corporal and above may serve as VCs as long as they have completed the required training. All tactical vehicles driven off installations are required to have at least two personnel, one of whom must be VC certified. VCs need not be licensed operators of the vehicle, although it is recommended. The VC may also be the operator of the vehicle depending on the mission (e.g. continuous operations) or for safety purposes. VC's must be familiar with the vehicle in which they are the vehicle commander, to include the vehicle limitations characteristics, and blind spots.